Beta Three

Ral2

USER MANUAL
ED-B3-MA-080710-002

Beta Three

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Ra12

PRODUCT FEATURES

- Two way full range active coaxial plastic speaker.
- Computer aided design to optimism frequency and phase response.
- One 12 inch woofer and 34 mm compression driver.
- HF/LF transducers are coaxially mounted sharing the same acoustic axis,

  Horn can be turned 90°.
- Wide dispersion: 90°× 40°.
- Suitable for full range sound reinforcement applications, also can be used as a floor monitor.
- Suitable for monitoring, conference system, small touring performance etc.
- Suitable for monitor, meeting, large performance and so on.
- The Ra12 is not water-resistant so please do not expose this speaker to rain or moisture.

SPECIFICATION

Speaker system

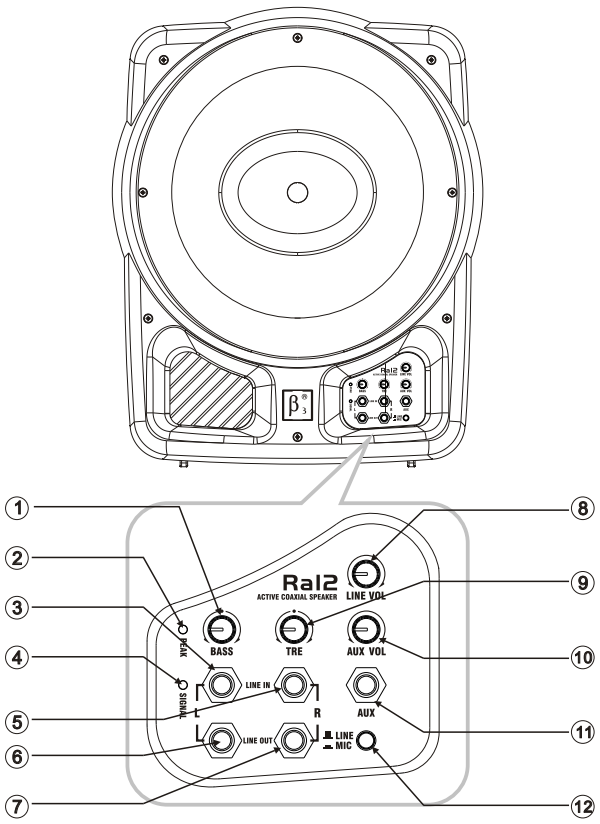
Frequency response	50Hz-20kHz
Average SPL	115dB
The max. Consumption power	220W
Input sensitivity: a.f=1kHz rated output power	1V ± 10%
b.f=1kHz rated output power	20mV ± 20%
LF tone: 120Hz	± 6dB
HF tone: 6.3kHz	± 12dB
Input mode	6.35 unbalance
Dispersion(H×V)	90°× 40°
Power suppy	~ 220V-230V 50/60Hz,T2.5AL
Net weight	16.5kg
Gross weight	19.5kg
Dimension	440 × 374 × 542mm
Packing dimension	490 × 420 × 608mm

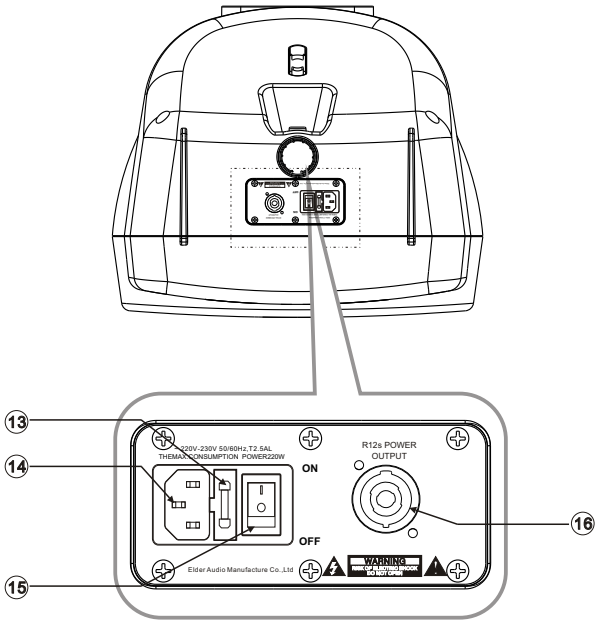
Transducer

Bass	12"/ 8Ω × 1
Treble	
	ϕ34mm/ 8Ω × 1

Ral2

FRONT AND REAR PANEL FUNCTIONS



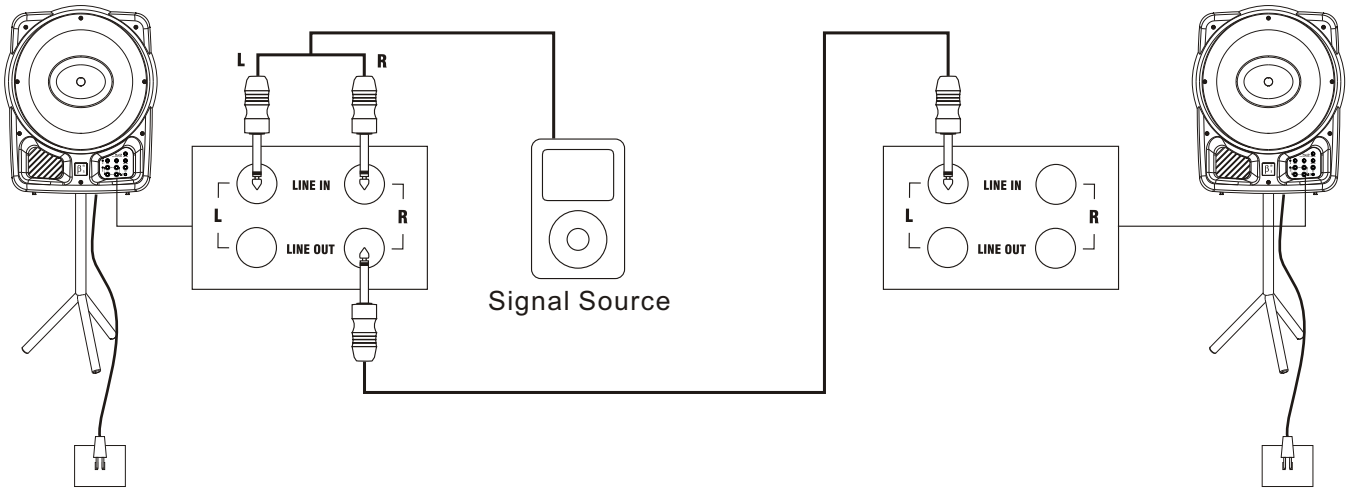


1. Bass tone control for the line level input (3). Increase the bass tone by rotating clockwise and decrease the bass tone by rotating counter-clockwise.
2. Overload indicator.
3. Line level input socket.
4. Signal indicator.
5. Line level input socket. Signal will be transferred from this socket to socket (7) for outputting after it is controlled by (8).
6. Signal output socket. Output signal.
7. Signal output socket. Transfer the signal on line (3) which is controlled by (1) to the signal input socket of another active speaker. It is also the signal output of AUX1\AUX2 which is controlled by (10) and (11).
8. Volume control for stereo (3)L and (5)R. Increase the volume by rotating clockwise and decrease the volume by rotating counter-clockwise.
   Attention: Please firstly adjust the volume to Min. when inputting and outputting signal, and then adjust to appropriate volume.
9. Treble tone control for the line level input (3). Increase the treble tone by rotating clockwise and decrease the treble tone by rotating counter-clockwise.
10. AUX volume control. Increase the volume by rotating clockwise and decrease the volume by rotating counter-clockwise. Be off at the Min. position.
11. AUX signal input socket.
12. Optional switch for microphone signal input and line signal input. Press button in for microphone signal, release button for line signal.
13. Fuse.
14. Power input socket.
15. Power switch.
16. Power output socket for R12s.

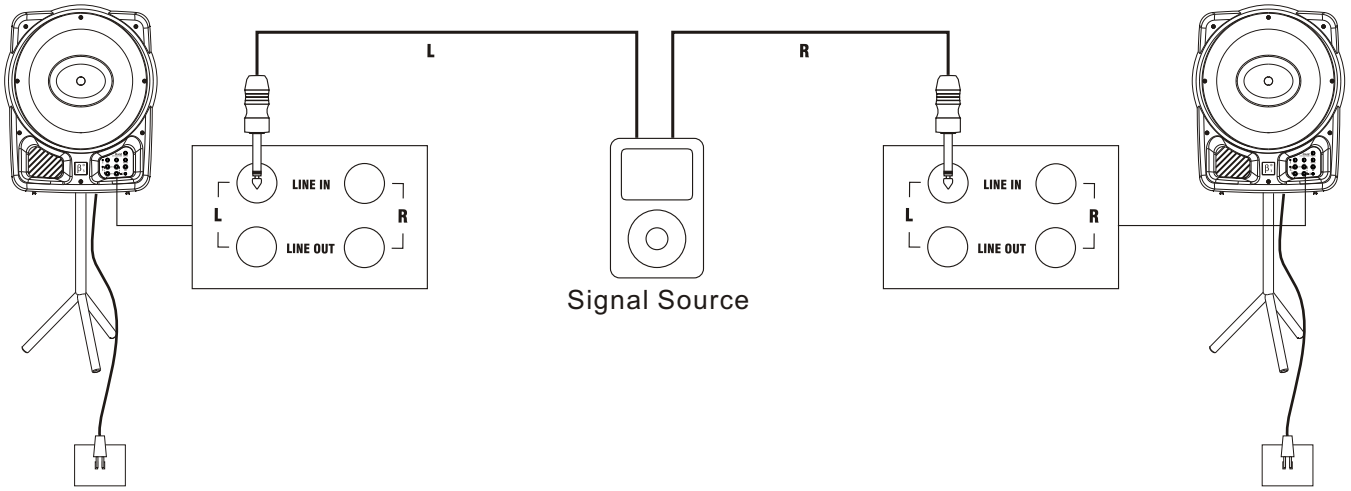
APPLICATION SAMPLE

Attention: Because LINE IN's R channel does not provide the power output, the signal should connect to LINE IN's L channel when connecting few pieces speakers.

1.Stereo mode I. (long distance)

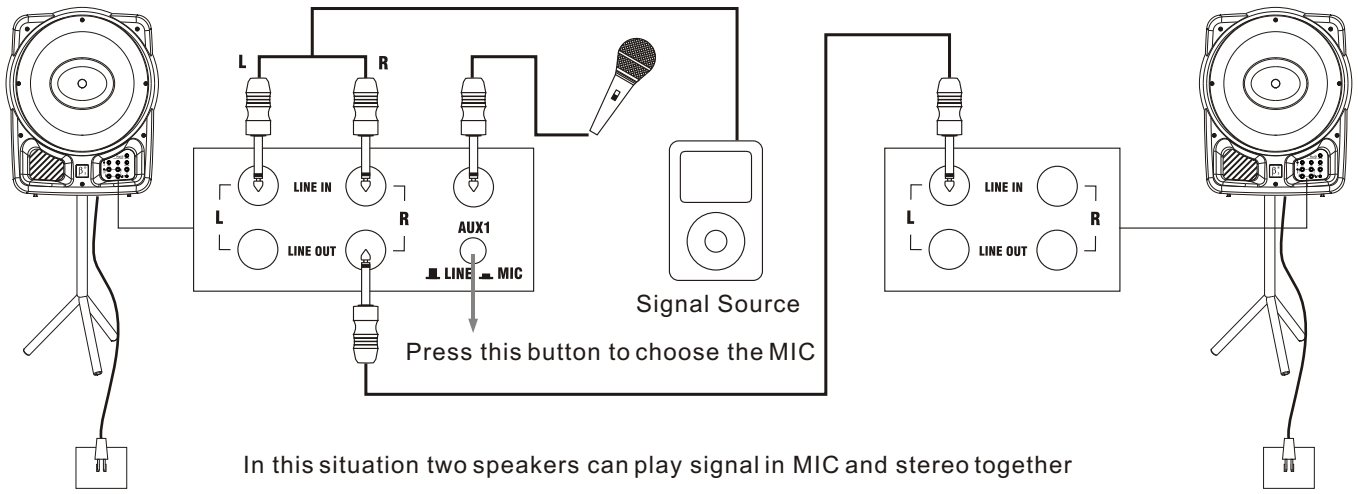


2.Stereo mode II.(short distance)



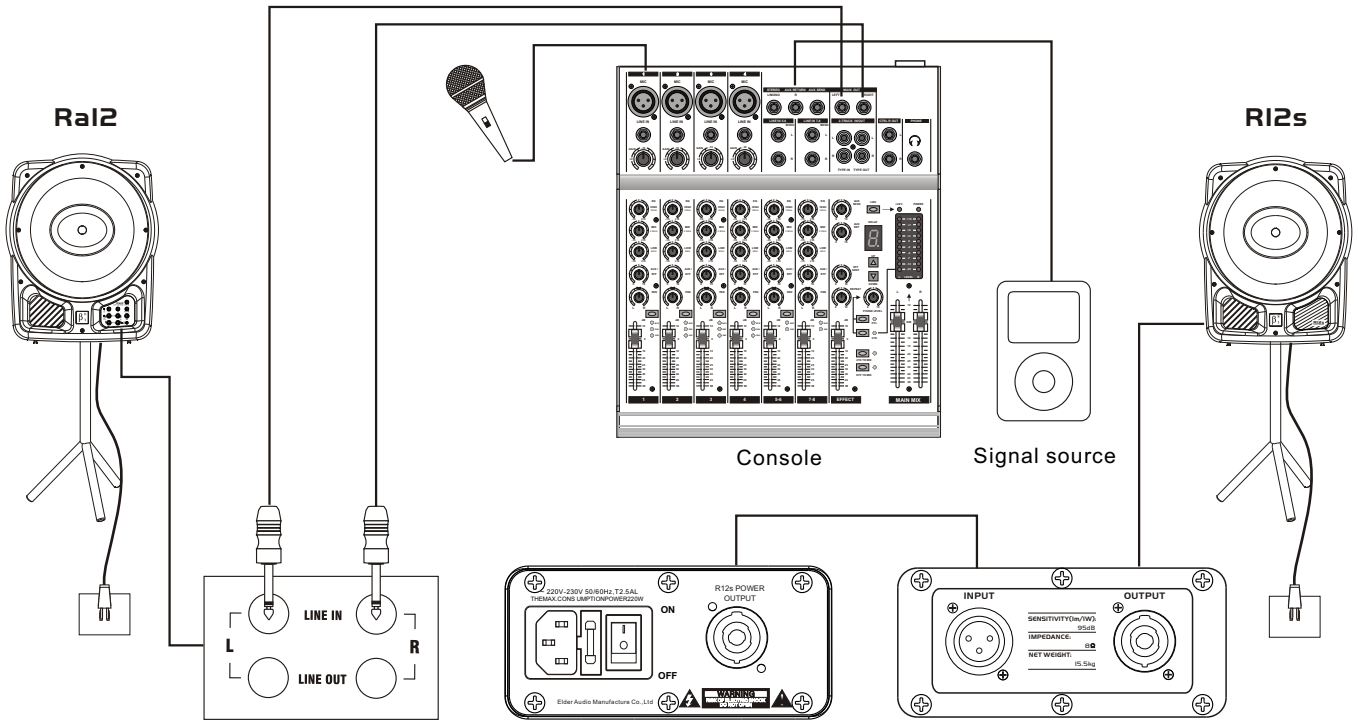
APPLICATION SAMPLE

3.Stereo+Mic(one)



In this situation two speakers can play signal in MIC and stereo together

4. Active + passive.

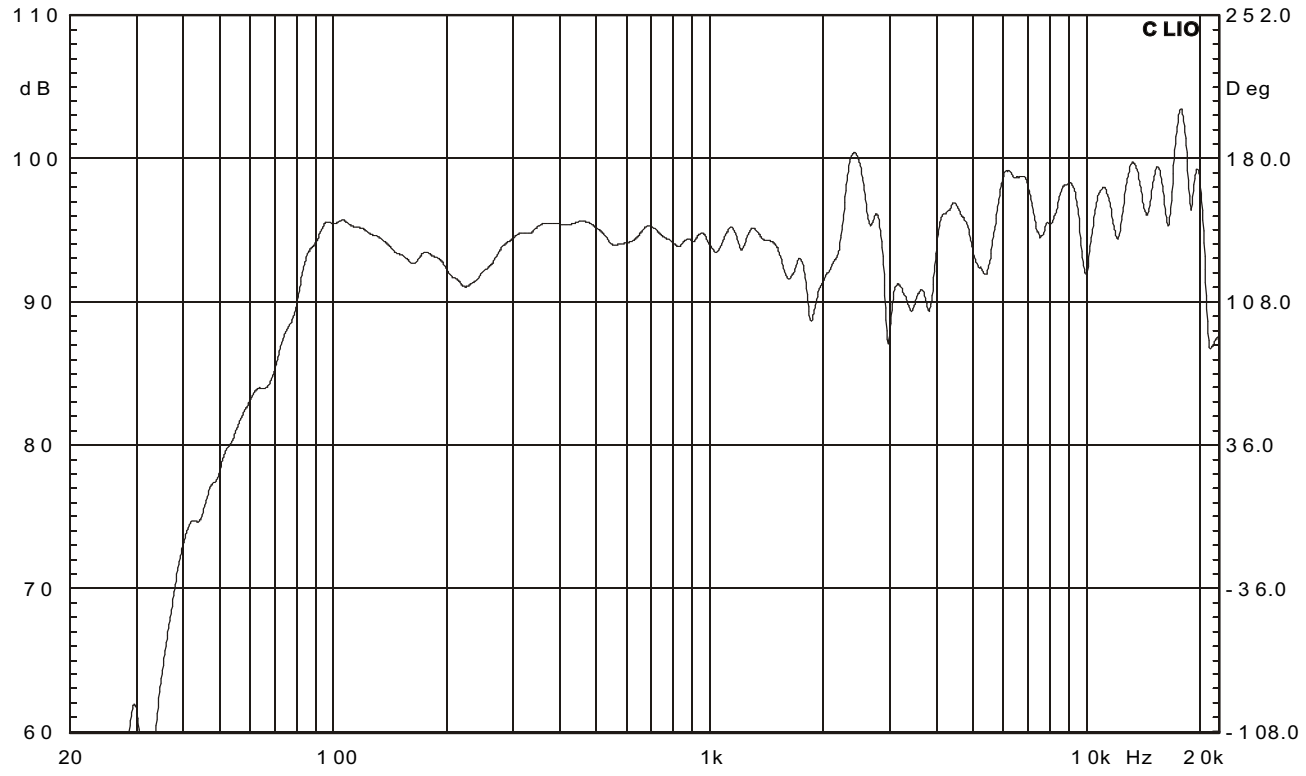


Rear input panel for Ra12

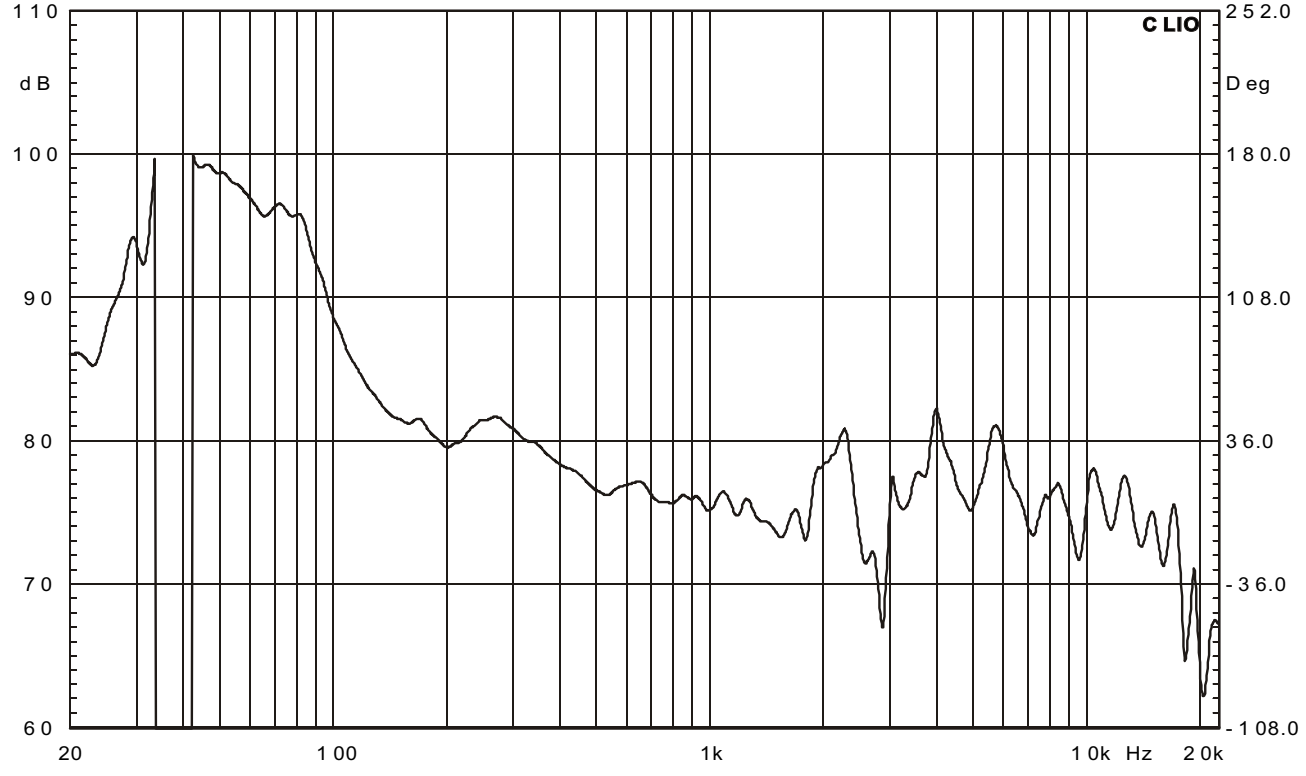
Rear input panel for R12s

Ral2

FREQUENCY RESPONSE



PHASE RESPONSE



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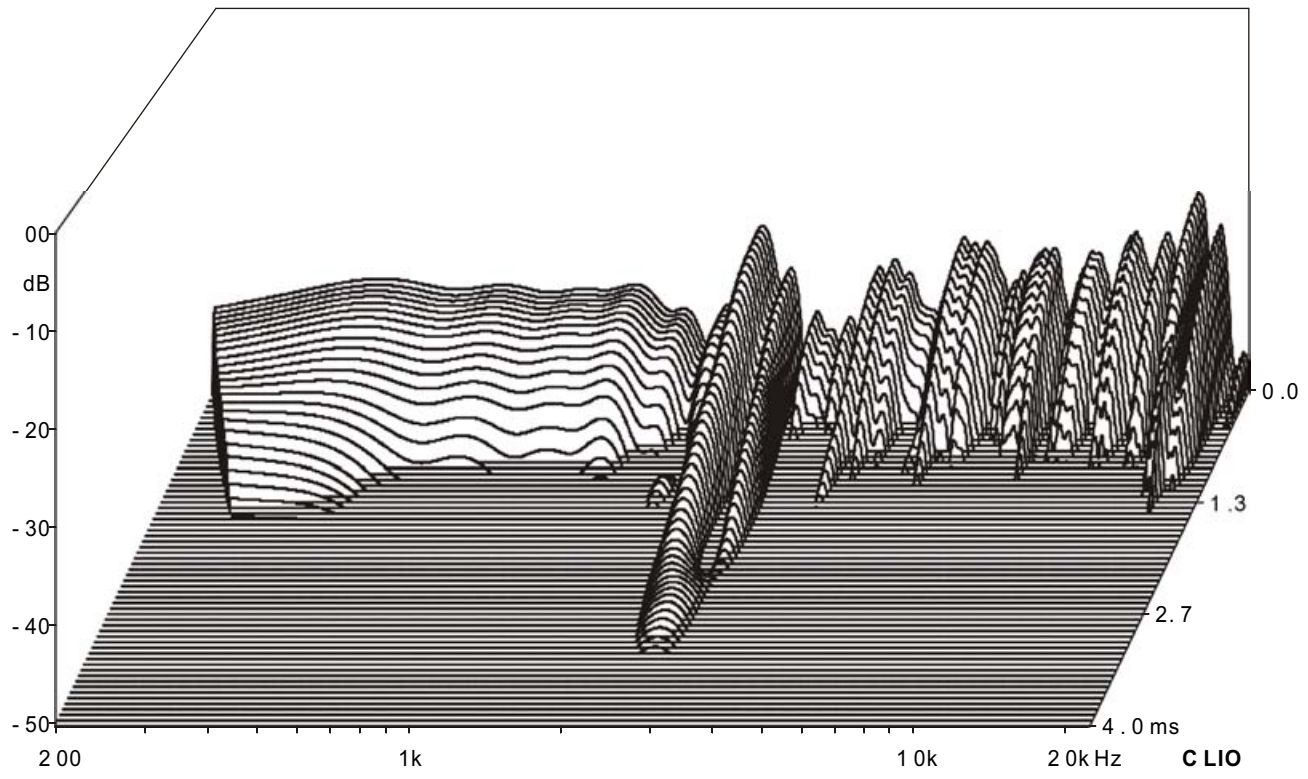
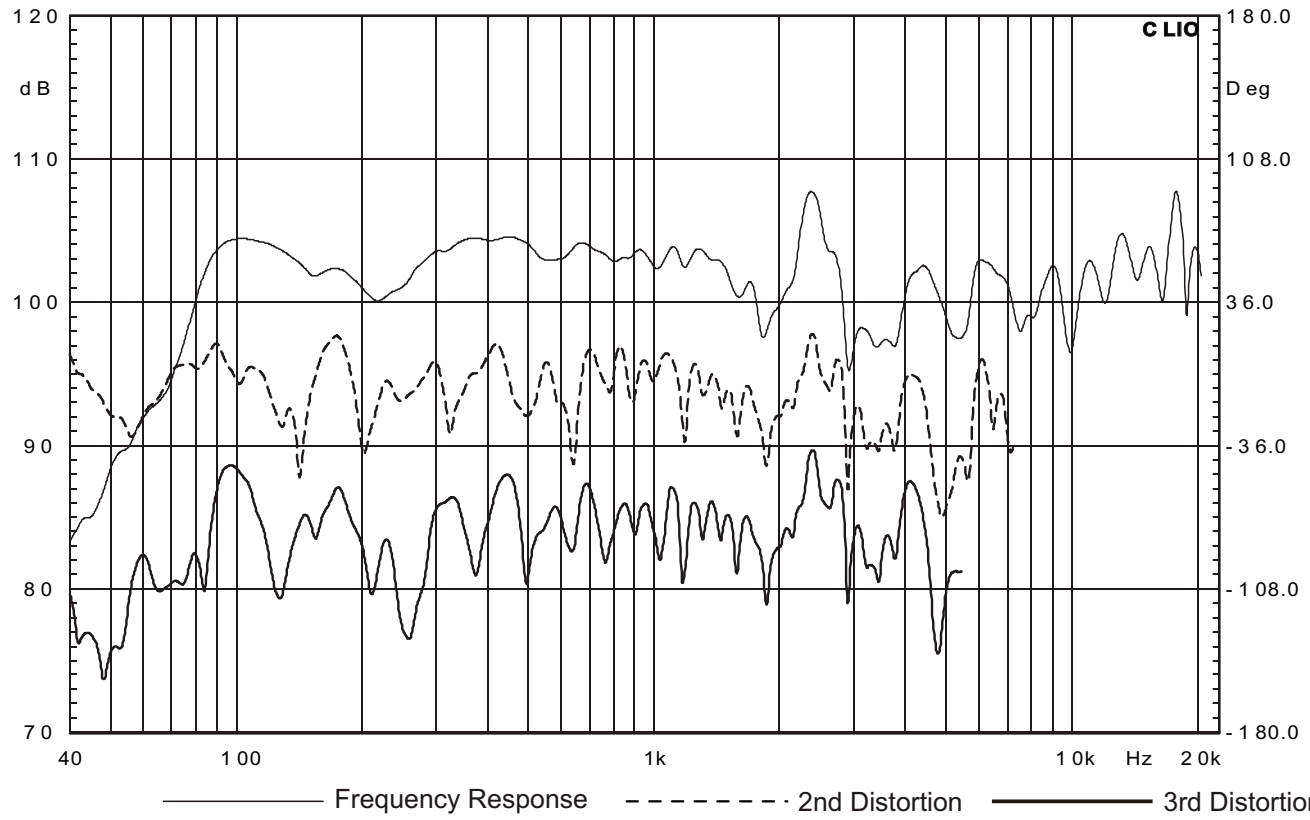
WATERFALL

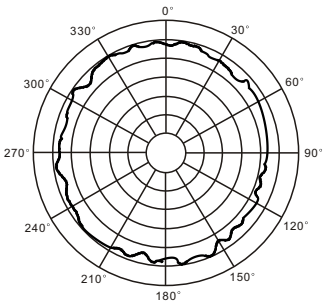


THD

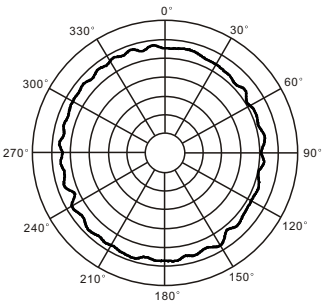


HORIZONTAL DIRECTIVITY

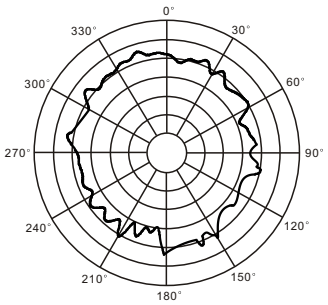
The data of Ra12 horizontal directivity were collected by testing the speaker system in a big anechoic chamber.



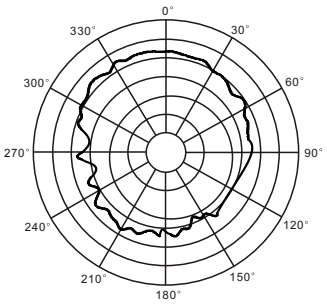
100Hz



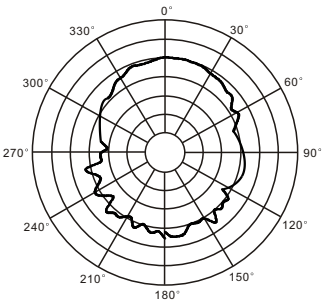
160Hz



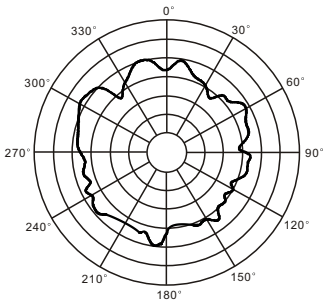
200Hz



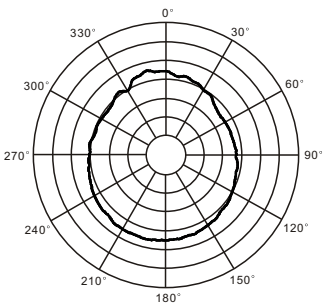
400Hz



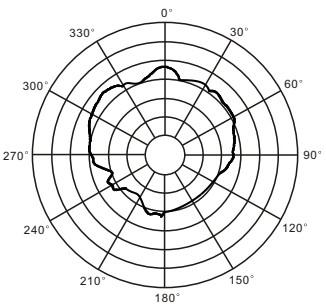
630Hz



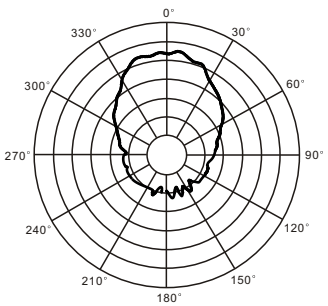
1.0kHz



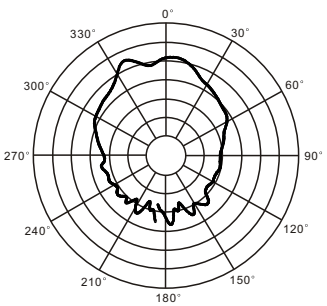
1.6kHz



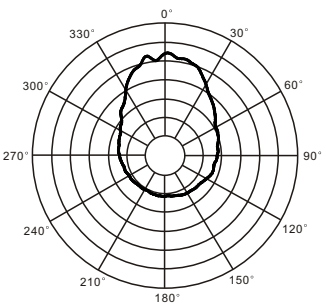
2.5kHz



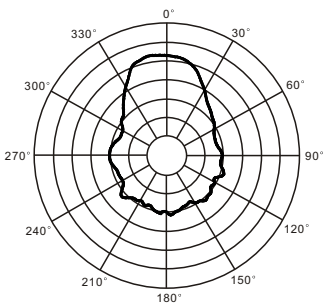
3.15kHz



6.3kHz



10kHz

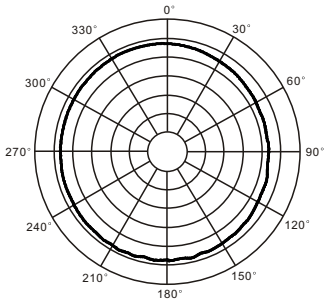


16kHz

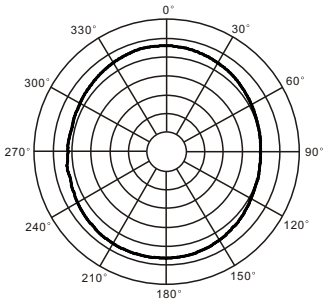
The scale is stepped by 6dB increment.

VERTICAL DIRECTIVITY

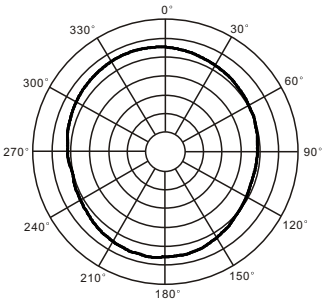
The data of Ra12 vertical directivity were collected by testing the speaker system in a big anechoic chamber.



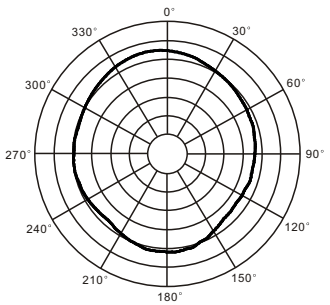
100Hz



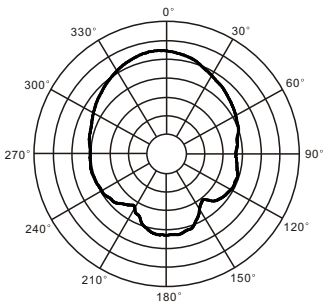
160Hz



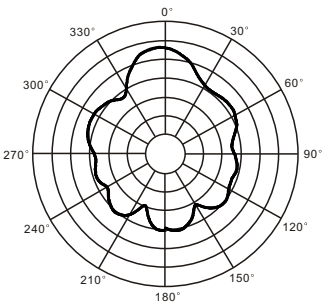
200Hz



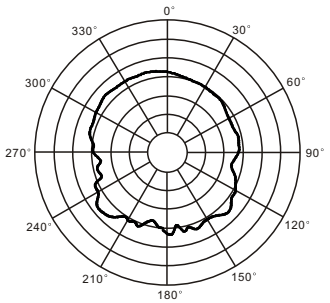
400Hz



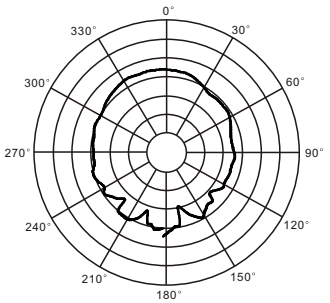
630Hz



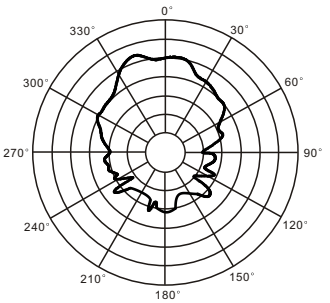
1.0kHz



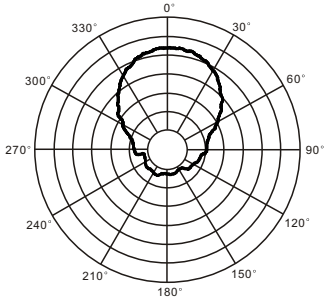
1.6kHz



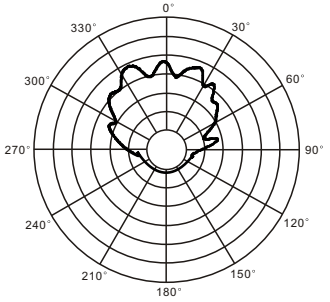
2.5kHz



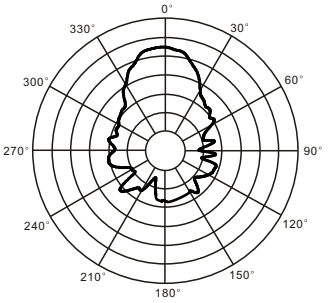
3.15kHz



6.3kHz



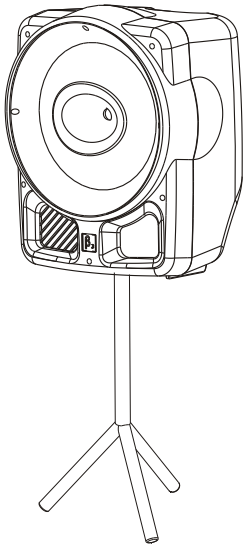
10kHz

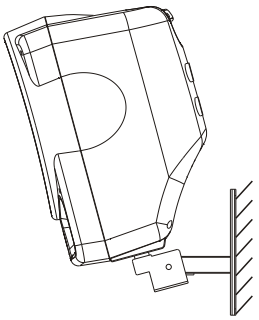


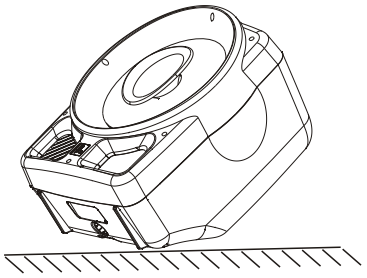
16kHz

The scale is stepped by 6dB increment.

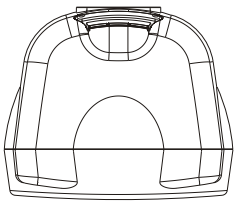
INSTALLATION



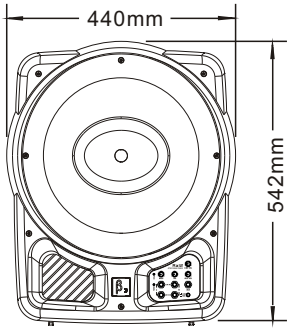




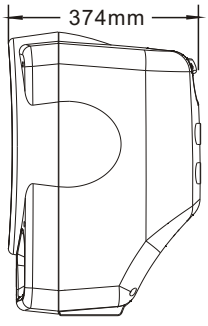
DIMENSIONS



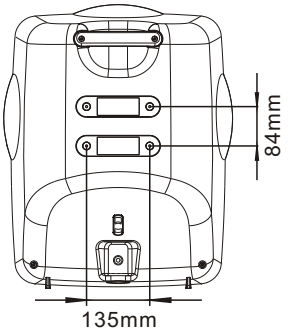
Top view



Front view



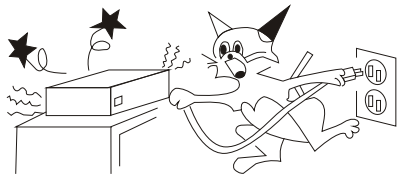
Side view

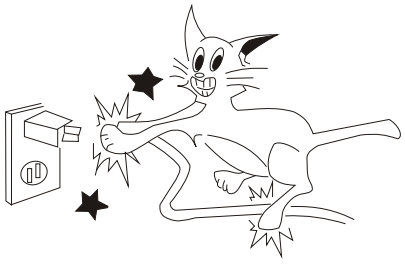


Back view

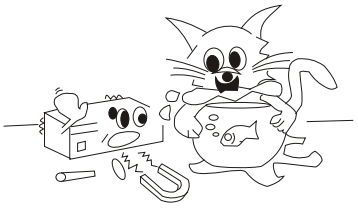
SAFETY INSTRUCTIONS

DO NOT OPEN THE COVER:
Do not open the cover to avoid the risk of electric shock caused by high voltage parts in the product. Warranty exclude damage caused by incorrect operation or installation of this product.



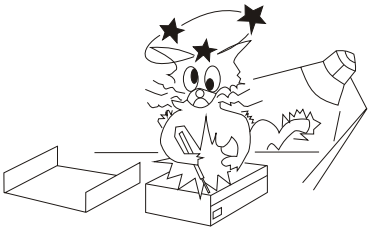


DO NOT DAMAGE THE POWER CORD:
Please hold the plug when pull out or plug in the cord. Do not pull out or touch the cord with wet hand, or it will cause the risk of electric shock. Power supply cords should be routed so they are not likely to be walked upon or pinched by items placed on or again st them. When removing the cord from a power outlet be sure to remove it by holding the plug attachment and not By pulling on the cord.

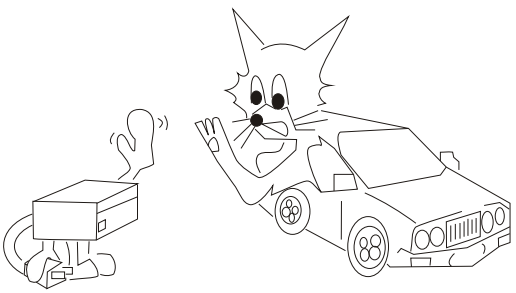


AVOID OBJECT AND LIQUID ENTRY:
Take care that objects do not fall into this product.
Please make sure water or moisture does not enter this product as damage will be caused.
Qualified personal should only open this product.

ABNORMAL STATUS:
In the event of abnormal noise or working conditions please turn off the mains power immediately.
Please refer to qualified person to check product.



WHEN NOT IN USE:
Please turn product off and remove mains power.



LIMITED WARRANTY

If manufacturing fault occurs during the specified warranty period from the date of original purchase, the product will be repaired or replaced without charge by Elder Audio.

The Limited Warranty does not apply to:

(a)exterior finish or appearance;

(b)certain specific items described in the individual product data sheet or owner's manual;

(c)malfunction resulting from use or operation of the product other than as specified in the individual product data sheet or owner's manual;

(d)malfunction resulting from misuse or abuse of the product;

(e)malfunction occurring at any time after repairs have been made to the product by anyone other than Elder Audio Service or any of its authorized service representatives.

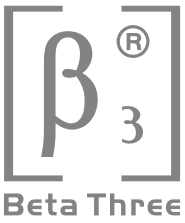
To obtain warranty service, customer must deliver proof of purchase of the product in the form of a bill of sale or receipt invoice.

Ra12 Speakers and Speaker Systems are guaranteed against malfunction due to defects in materials or workmanship for a period of three (3) years from the date of original purchase. The Limited Warranty does not apply to burned voice coils or malfunctions such as cone and/or coil damage resulting from improperly designed enclosures. Additional details are included in the Limited Warranty statement.

Ra12 Accessories are guaranteed against malfunction due to defects in materials or workmanship for a period of one (1) year from the date of original purchase. Additional details are included in the Limited Warranty statement.

Ra12 Flying Hardware (including enclosure-mounted hardware and rigging accessories) is guaranteed against malfunction due to defects in materials or workmanship for a period of one (1) year from the date of original purchase. Additional details are included in the Limited Warranty statement.

Specifications are subject to change without notice.



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